THE FARMER'S ADVOCATE.

Fruit, Forest and Ornamental Trees in the

Northwest. Arbor Day is to be observed this year in Manitoba, also throughout the N. W. T., on May 10th. by proclamation of the Lieut.-Governor-in-Council.

In the ADVOCATE, April 20th, 1893, appeared three very excellent essays by practical men on "Why Arbor Day Should Be Observed at Manitoba and Northwest Public Schools, with Suggestions for the Programme of the Day."- We trust that the good work already begun in many school districts, of tree planting and otherwise beautifying the grounds, will be continued and extended with renewed vigor each year. Mr. D. F. Wilson, in his paper on "Agriculture in the Schools" in this issue, makes a capital suggestion in this connection.

We would also call special attention to the very instructive essay delivered before the Virden Farmers' Institute by Mr. Caldwell on "Tree Planting," which appears in this issue.

The immense number of inquiries which have heen received at both our Experimental Farms this season shows a wonderful increase of interest in arboriculture generally, and already in very many districts it is quite a common sight to see a nice young shelter belt around the farm buildings.

We will now very briefly review what is being done at the Indian Head and Brandon Experi-mental Farms, where very large and important additions have been made, not only to the number, but also to the variety of trees and shrubs, and in most cases with very gratifying results.

The season of 1893 was a very favorable one for tree growth, particularly so at Indian Head, and the writer noticed, upon a recent visit to these farms, that nearly all trees had made a vigorous growth and apparently the new wood had well matured before winter set in.

BRANDON FARM.

The following table will give an idea of the growth made by a variety of hardy trees well suited to this climate. All were one-year seedlings and cuttings planted 1889.

Variety.	Growth in Height.	In Circum-
Populus Bereolensis Wolste Riga	14 feet.	13 inches.
"Siberica Cottonwood Salix Varonesh		
" Acutifolia Artemesia Ambrotans	9	6
Ash Leaved Maple Native White Elm	12 4 10 4	5 **

It has been thought that if tree growing was a success in this country we would be limited to a very few varieties, but the following list of trees and shrubs have been set out around the superin-tendent's residence, and are all considered likely to succeed by Mr. Bedford succeed by Mr. Bedford :

White Ash, European Alder, Mountain Ash, Native Birch, Out Leaved Weeping Birch, Beech, Fagus Ferrugines, Globe and Common, Cedar, Manitoba White Elder, Poplar (Populus tremu-loides), Balm Gilead, six varieties of Russian Poplar, Jack Pine, Scotch Pine, Native and Ontario White Spruce, six varieties Salix, two of Artemesia, three Barberry, Ground or Sand Cherry, three Caragana, Flowering Currant, Golden Elder, Tartarian Honeysuckle, Snowberry, two Hazelnut, Native Cornus, Native fifteen Lilac, Russian Olive, Philadelphias, Native Rose, eight Spirea, Native Saskatoon, two Viburnum. INDIAN HEAD.

As before stated the season of 1893 has been the best for tree growth since the farm started, and of the 9,000 trees transplanted last spring nearly all lived and did well. There are now living on the farm somewhere about 115,000 trees, distributed as follows: 46,676 in shelter belts, 15,800 in plantation, 2,000 in avenues these principally are Manitohe 2,000 in avenues; these principally are Manitoba maples. In the gardens and lawns there are the following: 270 Riga Pine, 389 Norway Spruce, 21 Cedar, 128 Mountain Ash, 58 Birch, 754 Poplar, 650 Willows 25 Russian Olives 50 Russian Poplar, 602 Willows, 25 Russian Olives, 50 Russian Poplar, 302 Cottonwoods, 3,500 Nebraska Blue, 25 Buffalo Berry, 300 Elms, 397 Artemesia, 5,000 three-year-old maples, 22,000 two-year-old maples, 15,000 seedling maples

In shrubs the Caragana continues to give best satisfaction. Artemesia Ambrotans is a most valuable shrub for windbreaks, growing fast and making thick matted hedge, good for gathering snow. Spirea also does well; Lilacs live but have not made much headway.

As yet none of the apple or crab trees have been able to withstand the winters; however, three Russian Dwarf apples planted in 1889 made good growth the past season, and now promise to do something. Last spring 118 trees, comprising 25 something. Last spring 118 trees, comprising 25 varieties of hardy apples, were planted in the maple grove where, they will be well sheltered. Ourrants—All varieties tried gave excellent results, fruit large and very fine. "Fay's Prolific"

leads all others.

Raspberries also do well; canes should, however, be laid down in the fall, and covered with two inches of earth and some well-rotted manure, and left covered late in spring to retard budding till all danger of frost is past.

Gooseberries-Smith's Improved and Houghton bore good crop of large fruit; 20 new varieties were set out last spring.

Gophers.

From many sections of the country come reports that the gopher is coming out this spring in unusual numbers, and the probability is that much damage will be occasioned by them. The following extract from a bulletin on the subject, issued by the Experi. mental Station, Laramie Co., Wyoming, will be read with interest :---

"Many ranchmen and gardeners use strychnine, rough on rats, arsenic and other poisonous sub-stances. Usually corn or some other kind of grain is soaked in a solution of one of these poisons, and is then placed near the burrows. This method has in some instances been satisfactory. There is this danger arising from the practice of such a method. Stock, poultry and the wild birds are as liable to get the grain as are the squirrels. During the summer of 1892, a number of experiments, having in view the destruction of these squirrels, were carried on upon the Laramie Experimental Farm. For this purpose a quantity of bi-sulphide of carbon was used. This liquid is highly inflammable and should never be brought near the fire, for fear of an explosion. It is not poisonous or corrosive to the skin, and may be handled with impunity. Avoid breathing it; the vapor is unwholesome. The only danger is when brought in the presence of fire—a lighted pipe, cigar or match would in all probability cause an explosion. Bi-sulphide of carbon should be kept from children and irresponsibile persons, as they are liable to drink it, and the consequence oht ant odor is easily and might be serious. The unpleasant odor is easily and readily detected, and by observing the proper precautions no danger need be feared. The method of applying is to take a ball of cotton about the size of an egg, and thoroughly saturate it with the bi-sulphide of carbon. One farmer, in Nebraska, in writing about the method of applying it says, that he uses the dried balls of horse manure, and finds that they do equally well and are of less expense, and can be easily obtained. He finds that they readily absorb the bi-sulphide of carbon. With a rolling motion, throw the cotton into the burrow. a rolling motion, throw the cotton into the burrow, and close the opening with some earth. The oper ation is simple and the result certain. The bi The bi sulphide of carbon evaporates rapidly, and being heavier than air, soon fills the burrow and smothers or overcomes the squirrels. The application should be made in the evening, at sun-down, as the squirrels are in their burrows at this time, and the material will not be waisted. A pint of this liquid will be sufficient to treat twenty burrows.

A Manitoba Butter Cow.

We have before mentioned Mr. Parkinson's (Portage la Prairie) cow, Prairie Queen, and given some account of her buttermaking qualities, her breeding, and the feed she was receiving while un-going this ninety-day test. Mr. Parkinson now furnishes us with a record of this cow's milk and butter yield for each seven days of the ninety days, which, as will be noticed, show considerable variation in percentage of butter to weight of milk. Probably, had this cow been tested under more favorable circumstances, she would have shown more uniform and higher results. Following are the figures as given by Mr. Parkinson :--

				WIIIK	Butter
HURELBOOK	200 24 3	Cour set	inter a marian	lbs.	lbs.
For the seven	day ending	January	14	327	163
	No. 1 March 1000	12 - 12 - 14 - 1 - 12 - 12 - 12 - 12 - 1	21	3664	175
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OPERATOR,	110 11 11 10 10 10	Star Partie	11	407	161
account lance	10" selectry	mices daily	18	357	151
	46	44	25	351	15
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March March	San Mr. San	66	11	360	14}
11	46	100 M	18	349	134
COLUMN STREET STREET	1911 - 14 4 - 167 - 168 - 168	14144 999.11	25	319	125
14666月間1158月	OIP ME CONTRA	April	Tutte red for	266	13
-Mater Milita	Loff Telespi	al Carlo	The charles cores	3013	13
- A Anna Anna Anna Anna Anna Anna Anna A				Contraction of the	A CONTRACTOR OF STREET

Total for ninety days..... 4635

It will be noticed that at the close of the test the yield was increasing. Mr. Parkinson refers us to the Hudson's Bay

Company's store, Portage la Prairie, for informa-tion as to the quality of the butter. And he is And he is anxious to know if there is a cow in Manitoba that can beat his Prairie Queen.

The columns of the ADVOCATE are open for authentic records of milk and butter yields.

Cattle Exporters Aroused.

The number and value of cattle exported from Canada to Great Britain has steadily declined from 104,133 and \$8,114,145 in 1890, to 89,572 and \$6,799,638 in 1893. This serious falling off is in part due to the scheduling of our cattle in Britain. We have all along contended that scheduling would hurt the cattle interests of Canada, and so it has proved. It also tends to promote the business of the U.S. dressed beef monopolists. Scheduling is not the only trouble with the Canadian export cattle trade, as the manifesto issued from Ottawa by the Dominion Live Stock Association recently ably and vigorously sets forth. It is charged that the very existence of the trade is jeopardized by reason of the unfair treatment to which it is subjected by those who control the ocean carrying trade from Montreal. Mr. Mulock, M. P., has a bill before Parliament which aims to remove these grievances and restore the cattle trade to a healthy basis. The shipping charges levied are described as "uncertain," "excessive," and "arbitrary." The manifesto referred to is signed by T. O. Robson, President, Thos. Grawford, Vice-President, Henry Bracken, John Dunn and A. J. Thompson. Mr. H. Gilchrist, Montreal, is secretary of the association.

During the month of March, England imported 8,151 tons of Canadian hay, and the general opinion

For windbreaks or hedges the Russian Poplar and Salix Acutifolia are by far the most promising varieties, although the Native Maple and Elm thicken up fairly well. The Native Ash is too slow a grower.

In fruit trees, until this year, Mr. Bedford had nothing favorable to say regarding apples. Now, however, he is beginning to have some hope, and has a very few varieties which have lived since 1889, and begin to look as though they might yet bear some fruit. These have a northly exposure, and are covered throughout the winter with heavy snow drifts. Those exposed to the south, even where surrounded by native scrub, have in every instance failed.

The Red Annis, an apple of very high quality, is most promising, followed by Yellow Annis, Duchess of Oldenburgh, Grandmother and Canada Baldwin. The Transcendent Crab is very successful, and success is now in sight with native plums, which are very hardy and capable of much improvement by selection and cultivation; some seventy wild plums were planted on the farm last year. In small finite, which do wonderfully well any-

In small fruits, which do wonderfully well any where in this country if given proper care and culti-vation, the Houghton Gooseberry does best, with Smith's Improved and Downing following, the latter being somewhat tender.

In currants Lee's Prolific heads the list, Champion and Naples also good. Turner and Philadelphia raspberries are both very hardy and good, Cuth-bert and Marlboro coming next. The Hilburn Risch Car in the both bert Black Cap is the best bearer.

To give an idea of the demand for forest and small fruit trees, Mr. Bedford reports applications for 59,000 forest tree seedlings and cuttings, 12,000 small fruit cuttings, and 400 one-pound bags of maple seeds, which will be sent out till the supply is exhausted.

The Hope of the Wheat Country.

Prof. Hays, Agriculturist of the Minnesota Experiment Station, concludes a very interesting article on "Who Makes Wheat Raising Pay?" in the Northwertern Farmer, in the following tersely put sentences :--

"The hope of the wheat country is the modest 'quarter-section' to 'section-farmer' who is get-ting into stock, raises a larger proportion of hay, annual fodder crops, and coarse grains which he retains, paying lessened freights on the finished live stock products, and all the time increases the pro-portion of his.living in his own fields, stables, hen-coops and gardens. He puts more per acre into buildings, groves, roads, homes and other permanent improvements than does the bonanza farmer, and who is making the mistake of not building more fences and better learning the live stock industries by giving himself some practice."

expressed by exporters is that the demand will increase.

According to the report of the Statistician of the United States, the attempts which have been made by the agricultural department to teach the Germans how to cook and eat corn bread have been a failure. how to cook and eat corn bread have been a failure. In spite of the encouraging reports sent to the department, the fact remains that although a national shortage of bread stuffs, famine or war may increase the consumption of maize for bread, in all cases it will only be temporary. The Germans do not eat hot bread, and the other ingredients necessary to make corn bread palatable are too expensive and not within the reach of the poorer classes, for whom the bread is mainly intended. Maize bread does not harmonize with the rest of the diet generally preferred by the Germans. Rye bread will always be the bread for the majority of the Germans, and bread made from the very choicest of wheat flour is demanded by the wealthy classes.

The Texas Live Stock Journal predicts a cattle famine, and gives as some of its reasons the follow-ing :— "The hard drought of the past few years, the large 'die-offs' of past winters and the never-before-heard-of shipments of cattle, calves and yearlings to market during the same period, all go to show that the producing power of our reaches bec that the producing power of our ranches has decreased to an alarming extent, to say nothing of the practice of spaying cows which has been so extensively carried on of late years. In many parts there are not one-fourth as many cattle as there were four years ago, while in other parts there are but little over one-half the usual number. It is likely that this scarcity will be severely felt by the coming summer. At present large numbers of cattle are being marketed on account of the drought last summer and the consequent scarcity of feed. It will be a welcome change to cattle feeders if this expected shortage should have the effect of stimulating prices somewhat. The feeling this spring has been greatly depressed.